

U.S. DEPARTMENT OF ENERGY OFFICE OF ENERGY EFFICIENCY AND RENEWABLE ENERGY

TRIBAL ENERGY PROGRAM



FY2003 Program and Project Review Meeting

November 17, 2003

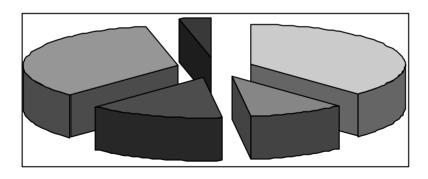
Lizana Pierce

DOE, Golden Field Office

Department of Energy

Advancing Energy and National Security through Science, Technology and Environmental Stewardship

DOE Budget of \$23.4 Billion



Energy (\$2.45 Billion) includes:

- Energy Efficiency and Renewable Energy (\$1.3)
- Fossil Energy (\$0.75)
- Nuclear Energy, Science and Technology (\$0.38)



- **□** Energy (10.5%)
- **■** Science (14.2%)
- **■** Environment (34.4%)
- Corporate
 Management (3.1%)





DOE's Office of Energy Efficiency and Renewable Energy (EERE)

EERE's Mission

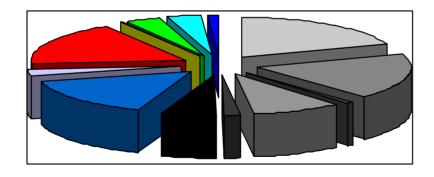
The EERE's mission is to strengthen America's energy security, environmental quality, and economic vitality in public-private partnerships that:

- Enhance energy efficiency and productivity;
- Bring clean, reliable and affordable energy technologies to the marketplace; and
- Make a difference in the everyday lives of Americans by enhancing their energy choices and their quality of life.

DOE's Office of Energy Efficiency and Renewable Energy

\$1.3 Billion Total EERE Budget Request (FY2004)

Energy & Water Development Request \$444.2 Million



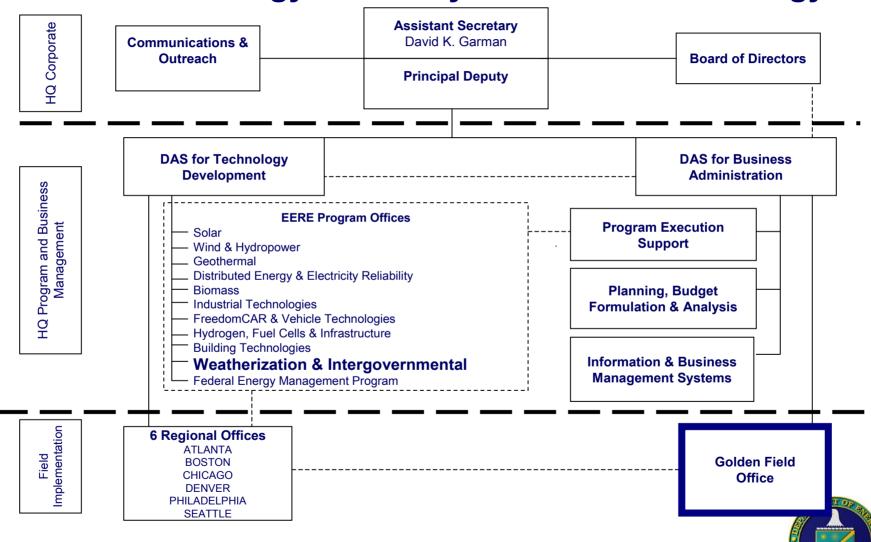
Tribal Energy Requested FY2004 Budget: \$6 Million

- □ Hydrogen
- Solar Energy
- Zero-Energy Buildings
- Wind Energy
- Hydropower
- Geothermal
- Biomass/Biorefinery Systems R&D
- □ Intergovernmental Activities
- Electric Reliability
- □ Energy Management
- NCCTI
- Program Direction
- Facilities & Infrastructure





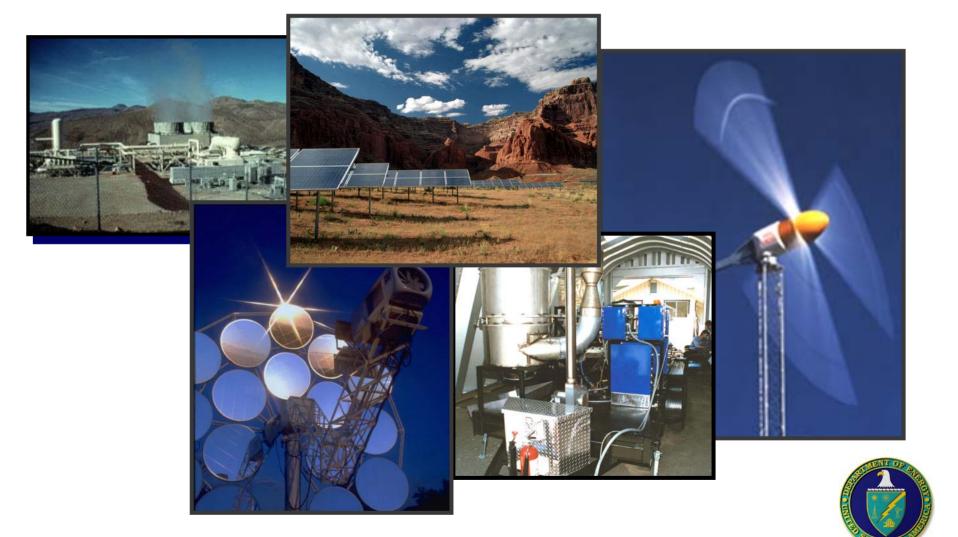
Office of Energy Efficiency and Renewable Energy



Renewable Energy Resources









Promote tribal energy self-sufficiency and foster employment and economic development on tribal lands through the use of renewable energy



Authority

Section 2606 of Title XXVI Energy Policy Act of 1992 (P.L. 102-486)



DOE's Tribal Energy Program Tribal Energy Program

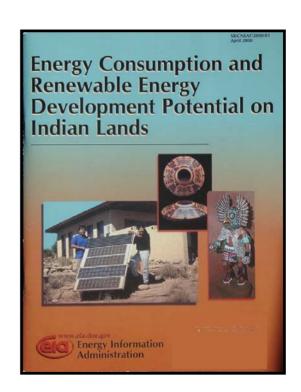
"Indian land comprises 5% of the land area of the United States, but contains an estimated 10% of all energy resources in the United States"

"Wind resources in the Great Plains could meet 75% of the electricity demand in the contiguous 48 sates." (Native American Energy Development and Self-Determination Act of 2003)





"Indian households on reservations are disproportionately without electricity. A total of 14.2% of Indian households have no access to electricity, as compared to only 1.4% of all U.S. households." Navajo accounts for 75% of the households without electricity (2000 EIA Report)





DOE's Tribal Energy Program Tribal Energy Program

Assist Tribes Meet Their Energy Goals

Developing in Cooperation with Tribes

- Peer Review (November 2001)
- Strategy Session (December 2001)
- Tribal Energy "Handbook" Workshop (December 2002)
- Collaborative activities with Tribal and Inter-Tribal Groups

Providing Funding Opportunities

- Competitive Solicitations

Supporting Government-to-Government Relations

Cooperative agreements between DOE and the Tribes



DOE's Tribal Energy Program Tribal Energy Program

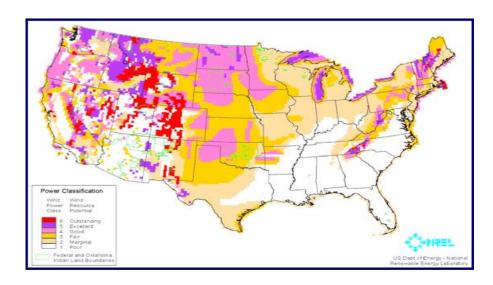
Providing Information and Technical Assistance

Technical Assistance

- Expert Advise
- Models and Tools
- Resource Maps

Information and Support

- Regional Workshops
- Program Brochure
- Tribal Energy Website
- Guide for Tribal Energy Development (Under development)







First Steps Toward Developing Renewable Energy and Energy Efficiency

Strategic planning

- Energy options analysis
- Capacity building
- Organizational development



Chairman Tex Hall, Three Affiliated Tribes

Ground Breaking for Wind Turbine on the Fort Berthold Reservation

Renewable Energy Development on Tribal Lands

- Feasibility studies
- Development projects (cost shared)

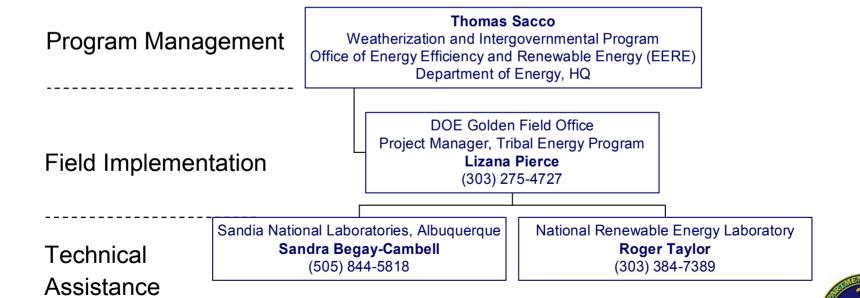


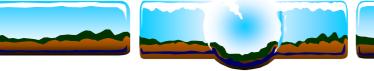


DOE's Tribal Energy Program

Tribal Energy Program Organization

Program Management through DOE Headquarters, implementation through the DOE Golden Field Office, and technical support through the DOE's Laboratories.





Tribal Energy Program History

BETWEEN FY1994 AND FY2001, DOE FUNDED 51 PROJECTS TOTALING OVER \$9.5 MILLION

Title XXVI Projects (Funded FY1994)

-35 Projects in 13 States (\$6.5 million)

Remote Applications Projects (Funded FY99)

-8 Projects in 5 States (\$1.9 million)

Tribal Colleges and Universities (Funded FY00-01)

- -7 Feasibility Studies in 6 States (\$700,000)
- -1 Project in New Mexico (\$431,000)



Solar Installation on Navajo Nation



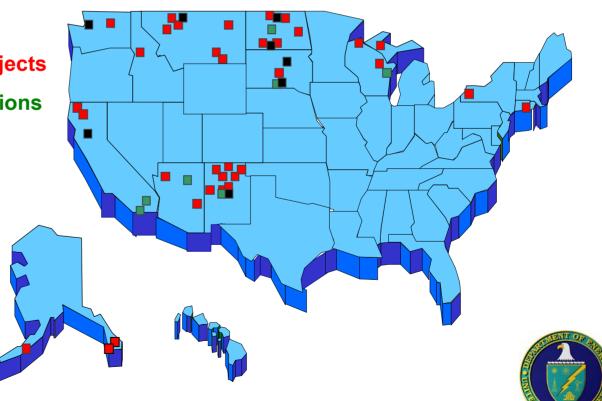


BETWEEN FY 1994 AND FY 2001, DOE FUNDED 51 PROJECTS TOTALING OVER \$9.5 MILLION



■= FY1999 Remote Applications Projects

■= FY2000-01 Colleges & Universities Projects



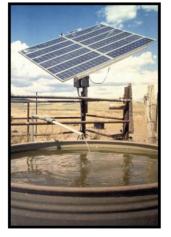
Renewable Energy Projects on Tribal Lands



Nez Perce Tribe

Biodiesel Pilot Project

Ute Mountain Indian Reservation **PV Water Pumping**



Turtle Mountain Band of **Chippewa Tribe**

Wind Resource **Assessment**











Pueblo of Laguna (Majors Ranch) Solar and Wind Installations

Navajo Nation (Dilkon/Teesto Chapters)

PV Arrays on Navajo Homes



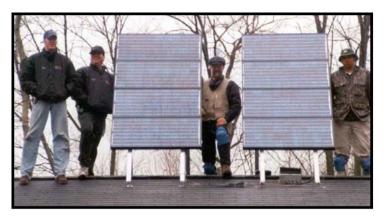




Renewable Energy Projects on Tribal Lands

Utility Scale Wind Turbine
Rosebud Sioux Indian Reservation





Oneida Tribe of Indians of Wisconsin Solar Project





DOE's Office of Energy Efficiency and Renewable Energy

Tribal Energy Projects

TOTAL OF 22 PROJECTS TOTALING \$4.6 MILLION FUNDED FROM FY2002 SOLICITATION

Renewable Energy Projects (Funded FY2002)

- 12 Feasibility Studies in 12 States (\$900,000)
- 2 Development Projects in 2 States (\$2,200,000)

Renewable Energy Projects (Funded FY2003)

- 8 Feasibility Studies in 8 States (\$1,500,000)

Rosebud Sioux Reservation,
July 4 Celebration





TOTAL OF 22 PROJECTS TOTALING \$4.6 MILLION FUNDED FROM FY2002 SOLICITATION

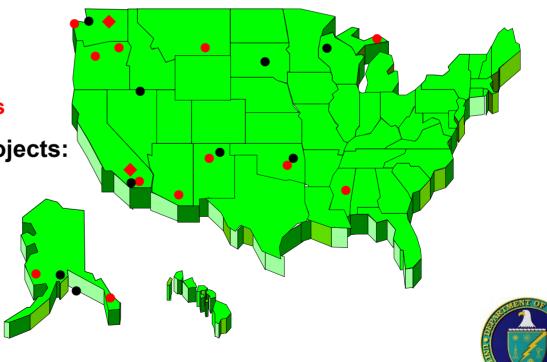
FY2002 Funded Projects:

= 12 Feasibility Studies

= 2 Developmental Projects

FY2003 Funded FY2002 Projects:

= 8 Feasibility Studies





DOE's Office of Energy Efficiency and Renewable Energy

FY2002 Tribal Energy Projects

Colville Confederate Tribes (WA)

Umatilla Indian Reservation (OR)

Confederate Tribes of Warm Springs (OR)

Kaw Nation of Oklahoma (OK)

Makah Tribe (WA)

Manzanita Band of Mission Indians (CA)

Mississippi Band of Choctaw Indians (MI)

Northern Cheyenne Nation (MT)

Sealaska Native Corporation (AK)

Pueblo of Jemez (NM)

Ramona Band of Cahuilla Mission Indians (CA)

Sault Ste. Marie Tribe (MI)

White Mountain Apache Tribe (AZ)

Yukon-Kuskokwim Health Corporation (AK)

Bristol Bay Native Corporation (AK)

Cherokee Nation (OK)

Lower Brule Sioux Tribe (SD)

Shoshone Paiute Tribes (NV)

St. Croix Tribal Government (WI)

Taos Pueblo (NM)

Tulalip Tribe (WA)

Viejas Tribal Government (CA)

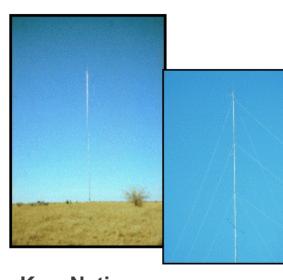




FY2002 Renewable Energy Projects

Northern
Cheyenne Nation
Wind Resource
Assessment





Kaw Nation
Wind Resource
Assessment





WASHINGTON STATE

OREGON

Colville Indian
Power and
Veneer Energy
Substation

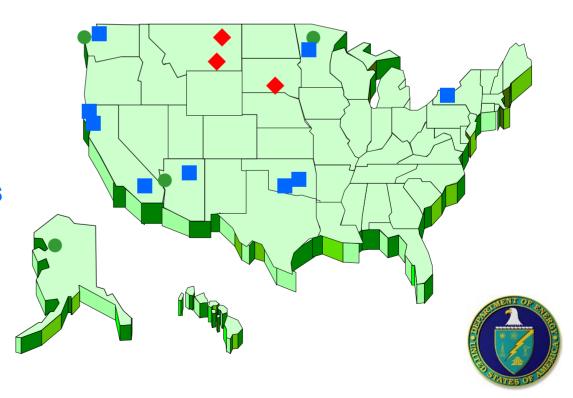




DOE Awarded \$2.9 Million to 16 Tribal Clean Energy Projects

FY2003 PROJECTS:

- ♦ = 3 DEVELOPMENTAL PROJECTS
- = 4 FEASIBILITY STUDIES
- = 9 FIRST STEPS STUDIES





FY2003 Tribal Energy Projects

Seven Projects in 6 States

Rosebud Sioux Tribe (SD)

Northern Cheyenne Tribe, Inc. (MT)

Assiniboine & Sioux Tribes of the Fort Peck Reservation (MT)

Native Village of Venetie (AK)

The Makah Indian Nation (WA)

Red Lake Band of Chippewa Indians (MN)

Fort Mojave Tribe (AZ)

Nine First Step Studies in 6 States

The Hopi Tribe (AZ)

Smith River Rancheria (CA)

Cabazon Band of Mission Indians (CA)

Seneca Nation of Indians (NY)

White Earth Reservation (MN)

Citizen Potawatomi Nation (OK)

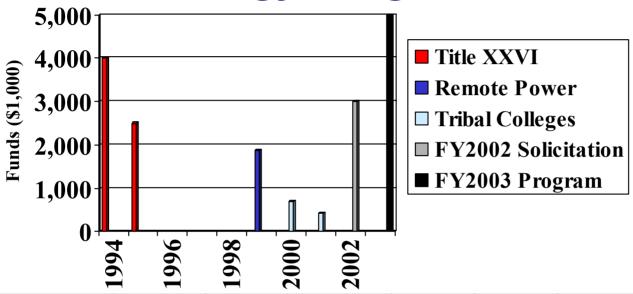
Fort Sill Apache Tribe of Oklahoma (OK)

Yurok Tribe (CA)

Samish Indian Nation (WA)



Tribal Energy Program Funding



	1994	1995	1999	2000	2001	2002	2003
Title XXVI	4,000	2,500					
Remote Power			1,900				
Tribal Colleges				700	430		
FY 2002 Solicitation						3,000	
FY2003 Program*							5,000

^{*} Congress appropriated \$6,000 with \$1,000 being non-discretionary



DOE's Tribal Energy Program Funding

FY2002 FY2003 FY2004

Enacted Requested Enacted Requested

\$3,000 \$8,307 \$6,000* \$6,000



^{*} Includes \$1,000 for Council of Energy Resource Tribes (CERT)



Tribal Energy Web Site

- Features
- Current Events
- Funding Opportunities
- Projects on Tribal Lands
 - Project Overviews
 - Status and Reports
 - Contacts
- Information Resource
- Contacts



Tribal Energy Program www.eere.energy.gov/tribalenergy





Tribal Energy Funding Opportunities

Announcements

Tribal Energy Program

www.eere.energy.gov/tribalenergy

Federal Grant Opportunities

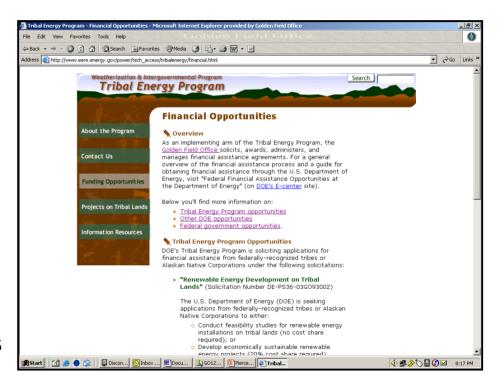
www.fedgrants.gov/

Federal Funding Opportunities

www.fedbizopps.gov/

Electronic Application Submissions

http://e-center.doe/gov



Tribal Energy Program www.eere.energy.gov/tribalenergy





- Framework for the planning and implementation of energy development strategies
- Tool for addressing energy needs and an aid in achieving energy vision

Strategic Planning

Where do you want to get to?



Options Analysis

Possible roads to the future.



Institutional Structures

The vehicles of change.



Project Development

Where the rubber meets the road.





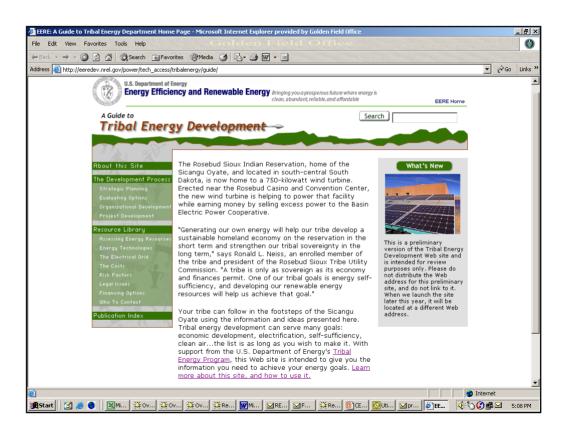
Guide to Tribal Energy Development

Development Processes

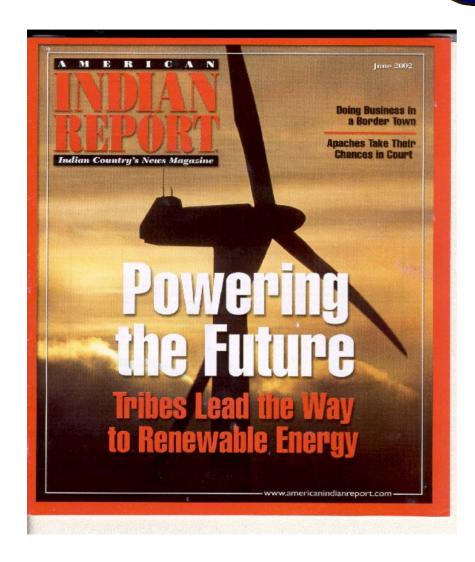
- Strategic Planning
- · Options Analysis
- Organizational Development
- Project Development

Resource Library

- Energy Resources
- Technologies
- Costs
- Risk Factors
- Legal Issues
- Financing Options
- Contacts







Questions

"Tribes Leading the Way to Renewable Energy"

American Indian Report
June 2002

